The Doctor of Medicine (Paediatrics) Programme at The University of the West Indies, Mona at 45 years, 1972–2017
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ABSTRACT

The Doctor of Medicine (DM) in Paediatrics Programme began in 1972 in Jamaica and was the first four-year clinical residency programme to be offered at The University of the West Indies (UWI). The DM Paediatrics programme trains residents for four-years and equips them after completion to practice as consultant paediatricians. Over the forty-five years of offering this programme, 237 students have been enrolled and 159 students have successfully completed the course. Over ninety per cent of the graduates are Caribbean nationals. Graduates from the DM Paediatrics programme at Mona are currently serving in Jamaica and other Caribbean countries, the United States of America (USA), Canada, Australia and the United Kingdom. Approximately, 24% have pursued subspecialty training and 60% work in a hospital-based setting while 30% work in private practice and 27% in academia and research. There are some of these that combine hospital ward work with academia and research. The DM (Paediatrics) Programme at the UWI, Mona, has achieved its mandate of providing paediatricians for Jamaica and the Caribbean and is committed to continue to train paediatricians to meet existing paediatric healthcare needs in Jamaica and the Caribbean.

Keywords: Doctor of Medicine, Jamaica, paediatrics, postgraduate, residency

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RESUMEN

El Programa de Doctor en Medicina (DM) en Pediatría comenzó en 1972 en Jamaica y fue el primer programa de residencia clínica de cuatro años que se ofreció en la Universidad de West Indies (UWI). El programa DM de Pediatría entrena a los residentes durante cuatro años y los faculta después de su terminación para practicar como pediatras consultores. En los 45 años de este programa, 237 estudiantes han sido matriculados y 159 estudiantes han completado con éxito el curso. Más del 90 por ciento de los graduados son nacionales del Caribe. Los egresados del programa DM de Pediatría de Mona prestan actualmente sus servicios en Jamaica y otros países del Caribe, los Estados Unidos de América (EE. UU.), Canadá, Australia y el Reino Unido. Aproximadamente, el 24% han continuado su formación en sub-especialidades; el 60% trabaja en el medio hospitalario, mientras que el 30% trabaja en la práctica privada; y el 27% en la academia y la investigación. Algunos de ellos combinan el
INTRODUCTION
In January 1970, The University of the West Indies, Mona, began training in postgraduate studies at the University Hospital of the West Indies in Kingston, Jamaica (1). One year later, in 1971, the SS HOPE (Health Opportunities for People Everywhere) visited Jamaica. SS HOPE along with the University and the Government of Jamaica formulated plans to have the University offer four-year residency programmes in various clinical disciplines. It was through these agreements that the Doctor of Medicine (DM) Paediatrics programme was established (1). This was in recognition of the need to provide adequate primary and secondary healthcare for the rapidly expanding child population of Jamaica at that time (1). In 1972, regulations for the DM Paediatrics programme were formally accepted by the University and in May 1972, eight students were registered in the programme (1). The DM Paediatrics programme initially trained residents at two hospitals located in Jamaica, the University Hospital of the West Indies and the Bustamante Hospital for Children. Since 2007, the programme was extended to The Bahamas and thus, a third rotational/training site is located at the Princess Margaret Hospital in The Bahamas.

Overview of the DM Paediatrics Programme
The DM Paediatrics programme trains students for a period of four years. At the inception of the programme, a few residents were exempted for a few years of training based on their experience and knowledge in the field (1). Thereafter, residents who had obtained the Diploma in Child Health, a one year programme designed to expose students to primary care pediatrics, were exempted from the first year of training and thus were only required to complete three years.

During the first two years of training, the student has three-month rotations in in-patient, neonatal care and ambulatory settings. The core content of training includes basic sciences as applied to general paediatrics, normal growth and development, common primary care problems and emergencies, common subspecialty problems, public health issues and basic research methods and skills. During years three and four, there is learning of the pathophysiologic mechanisms related to growth, development and disease, clinical exposure and training in the subspecialties, development of leadership skills and professional qualities, completion of the required research project and a six-month elective period (2). There is a very high standard of training as it was recognised that some graduates would return to their native countries possibly as the sole trained paediatrician. Therefore, at the end of the DM Paediatrics programme, the graduate is qualified to work independently as a consultant pediatrician.

One important component of the training programme was the production of a case book of twenty cases or the completion of a clinical research project. Later, there was a change from the case book with the clinical research project becoming mandatory.

Initially residents were required to sit only one examination at the end of the four years. In 1998, this changed, under the leadership of Professor Robert Gray, Head of the Department of Obstetrics, Gynaecology and Child Health, who along with members of the Specialty Board in Paediatrics thought it would be more effective to perform a summative assessment of the students’ performance after the initial two years of training and at the end of the four years of training. Following this decision, the concept of a DM Paediatrics Part 1 was introduced and examinations were held twice over the four-year period. The DM Paediatrics Part 1 examination is attempted after the successful completion of two years of training and the DM Paediatrics Part 2 examination two years after passing the Part 1.

The DM Paediatrics Programme at training sites in Jamaica
Since the inception of the DM Paediatrics programme, 214 students have been registered at training sites in Jamaica. Seventy-five per cent of students were female.
There has been an increasing proportion of female graduates over the last two and a half decades (Fig. 1).

![Fig. 1: Gender distribution of graduates from the DM Paediatrics programme at Mona per decade, 1973–2017](image)

The majority of students have been Caribbean nationals although there have been a few students from countries in Asia, Africa and Europe (Fig. 2).

![Fig. 2: Nationalities of graduates from the DM Paediatrics programme in Jamaica](image)

There has been an increase in the enrolment over each decade. The modal number of students newly enrolled each year was two during 1971 to 1979, seven between 1980 and 1989, six between 1990 and 1999, eight between 2000 and 2009 and 12 between 2010 and 2017 (Fig. 3).

![Fig. 3: Number of students registered and graduated from the DM Paediatrics programme in Jamaica per decade, 1973–2017.](image)

Over the 45 years of existence of the programme in Jamaica, 151 (71%) have completed the programme and 35 (16%) are currently enrolled. The first graduate was Dr Eve Palomino in 1973. There has been a steady trend of increasing numbers of graduates for each decade except for 1990–1999 (Fig. 3). Since 2010, there have been 56 graduates. The failure rate has been extremely low. Only 5 (2%) were unsuccessful and thereafter withdrew from the programme. Twenty-three (11%) withdrew voluntarily, some to pursue paediatric residency training in the USA.

**The Bahamas training site for the DM (Paediatrics) Mona programme**

Postgraduate medical training in paediatrics was commenced at the School for Clinical Medicine and Research, The UWI, The Bahamas in 2007 under the Deanship of Professor Archibald McDonald. The objective was to make specialty training more accessible to The Bahamian nationals. In 2007, the first two students were admitted to the DM (Paediatrics) Programme in The Bahamas. Three residents are admitted to the programme in The Bahamas annually.

Since the commencement of training in the DM Paediatrics programme in The Bahamas, there have been 23 students enrolled. Eight (35%) have successfully completed the four years of training, 12 (52%) are currently registered, two (9%) have been unsuccessful and one (4%) has withdrawn.

**Training of Residents from the UWI, Cave Hill campus, Barbados**

Over an 11-year period, between 1983 and 1994, residents from the Cave Hill campus were required to rotate through the Jamaica training site for a period of one year. During that time, nine residents from the Barbados programme rotated at Mona. Six of those paediatricians now work in Barbados, one works in St Lucia, one works in St Kitts and one is a paediatric cardiologist in the Southern USA.

**Impact of the DM Paediatrics Programme**

Graduates of the DM (Paediatrics) programme at Mona, Jamaica, are currently practising in the Caribbean, USA, Canada, Australia and the United Kingdom (Figs. 4–6). Approximately 24% have pursued post-doctoral sub-specialty training in the following subspecialties – Adolescent medicine, Allergy and Immunology, Cardiology, Critical Care, Developmental and Behavioural Paediatrics, Emergency Medicine, Epidemiology, Genetics, Infectious Diseases, Neonatology, Neurology, Nephrology, Nutrition, Public
Fig. 4: Map highlighting countries in the world where DM Paediatrics graduates are currently practising.

Fig. 5: Map highlighting countries in the Caribbean region where DM Paediatrics graduates are currently practising.
CONCLUSION

The DM Paediatrics programme in Jamaica has had significant success in producing highly trained general paediatricians for Jamaica and the Caribbean. This has supported the development of paediatric subspecialists which has improved the quality of care of children with chronic disorders. It has met the initial objectives set and is poised to continue to support the improvement of healthcare of children within the Caribbean region.

REFERENCES


The Future of Postgraduate Paediatric Medical training in Jamaica

The DM Paediatrics programme will continue to train paediatricians for Jamaica and other countries in the Caribbean, as there are still unmet needs. There is at least one parish in Jamaica without a paediatrician and the most rural parishes have only one or two paediatricians. There are also countries within the Caribbean region with too few paediatricians per population.

In Jamaica, the majority of children still receive routine healthcare from general practitioners without the benefit of specialized care from paediatricians. There are very few paediatricians employed in health centres within Jamaica and so there remains a need to provide paediatricians to work in these settings to extend the reach to a larger proportion of Jamaican children.

Fig. 6: Map highlighting parishes in Jamaica where DM Paediatrics graduates are currently practising.